

What is claimed is:

1. An image processing device comprising:

a first storage means for storing source image data in units of pixels;
a second storage means for storing destination image data in units of pixels; and
a rendering means for performing an action of applying a stipulated pixel-unit operation to the source image data stored in said first storage means and rendering the data as destination image data in the second storage means in units of polygons repeatedly until a stipulated arithmetic result is obtained.

2. The image processing device recited in Claim 1, wherein the source image data stored in said first storage means is image data output from a video camera.

3. The image processing device recited in Claim 1, and further comprising ~~specification~~ means for specifying an operation mode between said source image data and said destination image data.

4. The image processing device recited in Claim 3, wherein said specification means specifies as said operation mode either a first mode wherein said source image data is added to said destination image data, or a second mode wherein said source image data is subtracted from said destination image data.

5. The image processing device recited in Claim 4, wherein said specification means further specifies as said operation mode a third mode wherein said source image data is stored as said

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C22 destination image data in said second storage means.

4.6. The image processing device recited in Claim 1, wherein said stipulated operation is one of convolution filtering, pyramid filtering, interframe differencing, interimage distance computation,
5 Hough transformation, motion blurring or bilinear interpolation.

5 7. The image processing device recited in Claim 1, wherein said image processing device is a computer entertainment device.

8. An image processing method in an image processing device including:
a first storage means that stores source image data in units of pixels, and a second storage means that stores destination image data in units of pixels comprising:
the image processing method comprising:
a rendering step wherein the action of applying a stipulated pixel-unit operation to the source image data stored in said first storage means and rendering the data as destination image data in the second storage means in units of polygons is performed repeatedly until a stipulated arithmetic result is obtained.

9. A distribution medium used in an image processing device including a first storage means
20 that stores source-image image data in units of pixels, and a second storage means that stores destination image data in units of pixels;
said distribution medium is used to distribute a program that executes processing comprising:

a rendering step wherein an action of applying a stipulated pixel-unit operation to the source image data stored in said first storage means and rendering the data as destination image data in the second storage means in units of polygons is performed repeatedly until a stipulated arithmetic result is obtained.

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10. An image processing device comprising:

storage means comprising a first storage unit that stores source image data in units of pixels and a second storage unit that stores destination image data in units of pixels;

a generation means that generates rendering commands that cause the action of applying a stipulated pixel-unit operation to the source image data stored in said first storage means and rendering the data as destination image data in the second storage means in units of polygons to be performed repeatedly until a stipulated arithmetic result is obtained; and

an execution means that executes rendering commands generated by said generation means.

11. The image processing device recited in Claim 10⁸, wherein the source image data stored in said first storage means is image data output from a video camera.

12. The image processing device recited in Claim 10, and further comprising specification means for specifying the operation mode between said source image data and said destination image data.

13. The image processing device recited in Claim 12, wherein said specification means

specifies as said operation mode either a first mode wherein said source image data is added to said destination image data, or a second mode wherein said source image data is subtracted from said destination image data.

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14. The image processing device recited in Claim 13, wherein said specification means further specifies as said operation mode a third mode wherein said source image data is stored as said destination image data in said second storage means.

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11. 15. The image processing device recited in Claim 10, wherein said stipulated operation is selected from the group consisting of convolution filtering, pyramid filtering, interframe differencing, interimage distance computation, Hough transformation, motion blurring and bilinear interpolation.

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12. 16. The image processing device recited in Claim 10, wherein said image processing device is a computer entertainment device.

17. An image processing method in an image processing device which has storage units that store image data, comprising:

20 a storage step wherein source image data is stored in a first storage unit in units of pixels and also destination image data is stored in a second storage unit in units of pixels; and

a generation step of generating rendering commands that cause the action of applying a stipulated pixel-unit operation to the source image data stored in said first storage means in said storage step and rendering the data as destination image data in the second storage means in units

of polygons to be performed repeatedly until a stipulated arithmetic result is obtained.

5 18. A distribution medium used in an image processing device that has storage units that store image data, to distribute a program that executes processing, the distribution medium comprising:

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CS/ a storage step wherein source image data is stored in a first storage unit in units of pixels and also destination image data is stored in a second storage unit in units of pixels; and

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65 a generation step of generating rendering commands that cause the action of applying a stipulated pixel-unit operation to the source image data stored in said first storage unit in said storage step and rendering the data as destination image data in the second storage unit in units of polygons to be performed repeatedly until a stipulated arithmetic result is obtained.

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70 19. An image processing device comprising:

a first storage means that stores source image data in units of pixels;

a second storage means that stores destination image data in units of pixels;

a first rendering means that performs one portion of the operations among some stipulated pixel-unit operations to the source image data stored in said first storage means and renders the data as destination image data in the second storage means in units of polygons; and

20 a second rendering means that performs another portion of the operations among some stipulated pixel-unit operations to the source image data stored in said first storage means, adds or subtracts this data to or from the image data already rendered by said first rendering means and renders the data as destination image data in the second storage means in units of polygons.

16. ¹⁵20. The image processing device recited in Claim 19¹⁵, wherein the source image data stored in said first storage means is image data output from a video camera.

17. ¹⁵21. The image processing device recited in Claim 19¹⁵, and further comprising specification
5 means for specifying the operation mode between said source image data and said destination image data.

18. ¹⁷22. The image processing device recited in Claim 21¹⁷, wherein said specification means specifies as said operation mode either a first mode wherein said source image data is added to said destination image data, or a second mode wherein said source image data is subtracted from said destination image data.

19. ¹⁸23. The image processing device recited in Claim 22¹⁸, wherein said specification means further specifies as said operation mode a third mode wherein said source image data is stored as said destination image data in said second storage means.

20. ¹⁵24. The image processing device recited in Claim 19¹⁵, wherein said stipulated operation is selected from the group consisting of convolution filtering, pyramid filtering, interframe differencing, interimage distance computation, Hough transformation, motion blurring or bilinear
20 interpolation.

21. ¹⁵25. The image processing device recited in Claim 19¹⁵, wherein said image processing device is a computer entertainment device.

22-26. An image processing method in an image processing device including a first storage means that stores source image data in units of pixels, and a second storage means that stores destination image data in units of pixels, the image processing method comprising:

5 a first rendering step wherein one portion of the operations among some stipulated pixel-unit operations are performed on the source image data stored in said first storage means and the data is rendered as destination image data in the second storage means in units of polygons; and

a second rendering step wherein another portion of the operations among some stipulated pixel-unit operations are performed on the source image data stored in said first storage means, this data is added to or subtracted from the image data already rendered in said first rendering step and the data is rendered as destination image data in the second storage means in units of polygons.

25-27. A distribution medium used in an image processing device including a first storage means that stores source image data in units of pixels, and a second storage means that stores destination image data in units of pixels, the distribution medium being used to distribute a program that executes processing comprising:

20 a first rendering step wherein one portion of the operations among some stipulated pixel-unit operations are performed on the source image data stored in said first storage means and the data is rendered as destination image data in the second storage means in units of polygons; and

a second rendering step wherein another portion of the operations among some stipulated pixel-unit operations are performed on the source image data stored in said first storage means, this data is added to or subtracted from the image data already rendered in said first

rendering step and the data is rendered as destination image data in the second storage means in units of polygons.

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